Remarks

Claims 1-5, 11-13, 15-20 and 53-67 were pending and examined in the Office Action of March 8, 2004. Of those claims, 1-5, 11-13, 15-20, 53-55, 57-60, 62-67 stand rejected and 56, 61 and 66 are objected to. With this Amendment and Reply, claims 1, 2, 3, 13, 16, 18, 19, 20, 53, 58, 63, 68, 69, 70, 71, 72, 73, 74 and 75 are amended, and claims 76-78 are newly added, to more particularly point out and distinctly claim the invention. The amendments are made without prejudice or disclaimer.

Remarks on the rejections entered in the Office Action of September 22, 2004 follow.

Rejections under 35 U.S.C. 112, first paragraph

Claims 1-5, 11-20, 53-55, 57-60, 62-65 and 67-74 stand rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement. It is asserted that there is no reference in the specification to functional variants of TRT (SEQ ID NO:3) that are altered in the central crossover region, or with inverted repeats in the central crossover region. Applicants respectfully request reconsideration and withdrawal of these rejections in light of the claim amendments and the following discussion.

Applicants point to the following areas of the specification that provide written description of the objected-to phrases. With regard to alterations of the central crossover region, at paragraph 61 on page 5 of the U.S. patent publication (US 20030113837), the specification states, ". . . sequences which may be altered include . . . the TRT central crossover region". Thus, alterations in the central crossover region were clearly envisioned by the inventor upon filing. Since the central crossover region only consists of 6 nucleotides, the possible alterations in the central crossover region are very few, whose structures can be envisioned by the skilled artisan. The specification also discusses inverted repeats, for example at paragraphs 70 and 71, on page 6 of the U.S. patent publication. Because the possible alterations in the central crossover region are

few, the skilled artisan would recognize that the inventor envisioned inverted repeats as among the few possible alterations.

The Declaration of Bernard Hallet previously filed further establishes that the skilled artisan could easily envision functional compounds comprising SEQ ID NO:3 with alterations in the central crossover region. Thus, the exact sequence of the altered sequences that are within the scope of the claims could be envisioned at the time of filing.

Claims 1-5, 11-13, 15-20, 54, 55, 57, 59, 60, 64, 65 and 67 also stand rejected under the written description requirement of 35 U.S.C. 112, first paragraph. These rejections are based on the use of "functional variants" in the claims. Applicants note that the phrase "functional variants" is not in the amended claims, and therefore believes that these rejections are moot.

In light of the above discussion, applicants respectfully request reconsideration and withdrawal of the rejections based on the written description requirement.

Rejections under 35 U.S.C. 102(b)

Claims 1-3, 11-13, 20, 53, 55, 58, 60, 63, 65 are variously rejected as being anticipated by Mahillion and Lereclus, 1988, EMBO J 7:1515-1526 ("Mahillion"). It is asserted that Mahillion anticipates those claims because it provides a sequence (FIG. 1 on page 1516 of Mahillion) that comprises TRT (SEQ ID NO:3) but not the entire sequence of TRT" (SEQ ID NO:4). That assertion was based on a computer comparison of SEQ ID NO:4 (as originally provided) and the Mahillion sequence. However, applicants correct SEQ ID NO:4 with this filing by providing a corrected sequence listing, which corrects SEQ ID NO:4 to be consistent with the sequence provided in FIG. 1A of the instant specification. With this correction, the Mahillion sequence does comprise the entire SEQ ID NO:4, and thus does not anticipate the rejected claims.

In light of the corrected sequence listing and the above discussion, applicants respectfully request withdrawal of the rejections under 35 U.S.C. 102(b).

Conclusion

Based on the claim amendments and the above discussion, applicants respectfully request withdrawal of all rejections and passage of the claims to allowance. If there are any minor matters preventing this result, applicants request that Examiner McGarry contact the undersigned attorney.

Applicants believe that no fee is required with this filing. However, if there are any unexpected fees required to maintain pendency of this application, the PTO is authorized to withdraw those fees from Deposit Account 01-1785.

Respectfully submitted

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Dated: New York, New York

December 22, 2004

By: ______ Elie H. Gendloff

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